

Notice of Allowability

Application No.

09/547,791

Applicant(s)

BECK ET AL.

Examiner

Art Unit

Susanna M. Diaz

3623

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address--

All claims being allowable, PROSECUTION ON THE MERITS IS (OR REMAINS) CLOSED in this application. If not included herewith (or previously mailed), a Notice of Allowance (PTOL-85) or other appropriate communication will be mailed in due course. **THIS NOTICE OF ALLOWABILITY IS NOT A GRANT OF PATENT RIGHTS.** This application is subject to withdrawal from issue at the initiative of the Office or upon petition by the applicant. See 37 CFR 1.313 and MPEP 1308.

1. ☒ This communication is responsive to Applicant's response filed August 8, 2005.
2. ☒ The allowed claim(s) is/are 1-4,6-11,13-18,20-25,27 and 28.
3. ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some* c) ☐ None of the:
1. ☐ Certified copies of the priority documents have been received.
2. ☐ Certified copies of the priority documents have been received in Application No. _____.
3. ☐ Copies of the certified copies of the priority documents have been received in this national stage application from the International Bureau (PCT Rule 17.2(a)).

* Certified copies not received: _____.

Applicant has THREE MONTHS FROM THE "MAILING DATE" of this communication to file a reply complying with the requirements noted below. Failure to timely comply will result in ABANDONMENT of this application.

THIS THREE-MONTH PERIOD IS NOT EXTENDABLE.

4. ☒ A SUBSTITUTE OATH OR DECLARATION must be submitted. Note the attached EXAMINER'S AMENDMENT or NOTICE OF INFORMAL PATENT APPLICATION (PTO-152) which gives reason(s) why the oath or declaration is deficient.
5. ☐ CORRECTED DRAWINGS (as "replacement sheets") must be submitted.
- (a) ☐ including changes required by the Notice of Draftsperson's Patent Drawing Review (PTO-948) attached
- 1) ☐ hereto or 2) ☐ to Paper No./Mail Date _____.
- (b) ☐ including changes required by the attached Examiner's Amendment / Comment or in the Office action of Paper No./Mail Date _____.
- Identifying indicia such as the application number (see 37 CFR 1.84(c)) should be written on the drawings in the front (not the back) of each sheet. Replacement sheet(s) should be labeled as such in the header according to 37 CFR 1.121(d).
6. ☐ DEPOSIT OF and/or INFORMATION about the deposit of BIOLOGICAL MATERIAL must be submitted. Note the attached Examiner's comment regarding REQUIREMENT FOR THE DEPOSIT OF BIOLOGICAL MATERIAL.

Attachment(s)

1. ☒ Notice of References Cited (PTO-892)
2. ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
3. ☒ Information Disclosure Statements (PTO-1449 or PTO/SB/08),
Paper No./Mail Date 7/13/01; 5/20/03; 3/2/05; 4/1/05
4. ☐ Examiner's Comment Regarding Requirement for Deposit of Biological Material

5. ☐ Notice of Informal Patent Application (PTO-152)
6. ☐ Interview Summary (PTO-413),
Paper No./Mail Date _____.
7. ☐ Examiner's Amendment/Comment
8. ☒ Examiner's Statement of Reasons for Allowance
9. ☐ Other _____.

Susanna Diaz
Susanna M. Diaz
Primary Examiner
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ALLOWANCE

1. This Office action is responsive to Applicant's response filed August 8, 2005.
Claims 1-4, 6-11, 13-18, 20-25, 27, and 28 are presented for examination.

Oath/Declaration

2. The oath or declaration is defective. A new oath or declaration in compliance with 37 CFR 1.67(a) identifying this application by application number and filing date is required. See MPEP §§ 602.01 and 602.02.

The oath or declaration is defective because:
It does not identify the citizenship of each inventor (namely Frank deNoyelles).

Allowable Subject Matter

3. Claims 1-4, 6-11, 13-18, 20-25, 27, and 28 are allowed.

4. The following is an examiner's statement of reasons for allowance:

The closest prior art of record is Price et al. ("Adapting a Patch Model to Simulate the Sensitivity of Central-Canadian Boreal Ecosystems to Climate Variability") and Reynolds ("The Ecosystems Approach to Water Management", abstract only). Price discloses computer simulation models that assist in evaluating the effects of climate variability on ecosystems (abstract). Computer simulation models are understood to comprise a database of simulation inputs and other variables, a front end system to receive the simulation request, a system to execute the simulation, and means for sharing data from the database by the various parts of the system as well as processing

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modules, administration modules, and background modules for performing processing, administration functions, and background functions, respectively. Price analyzes data including soil moisture content (§ 11), a daily water balance (§ 13), estimates of daily and seasonal runoff (§ 15), biomass, basal area, stem density, and annual productivity for various tree species (§ 26), and climate information (§ 29). This data comprises both observed measurements as well as predicted ones, as discussed throughout Price. Consequently, various ecological problems and potential solutions are identified (§§ 33-43). Therefore, Price's models imply use of "*at least one* of terrestrial vegetation history data, terrestrial vegetation forecast data, body of water history data, a list of observable problems, a list of fundamental problems, and a list of solutions" (independent claims 8, 22) to execute a simulation. While part of Price's observable problems include information about a density of terrestrial vegetation, Price does not teach or suggest that the density of terrestrial vegetation is "within a vicinity of the body of water" nor does Price address the other options from the list of observable problems (i.e., fish activity within the body of water, a taste of the body of water, or an odor of the body of water). Additionally, Price does not teach or suggest that the list of fundamental problems includes information about at least one of a density of nutrients within a soil within said vicinity of the body of water and a distribution of thermal energy within the body of water (claims 8, 22). Price takes into account a soil moisture content; however, there is no identification of a body of water including one of a lake, reservoir, or pond (claims 8, 22). The abstract of Reynolds introduces the concept of the ecosystems approach to water management (e.g., in lakes and river catchments), yet Reynolds fails

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to disclose or suggest the details of the observable and fundamental problems already lacking in Price. Independent claims 1 and 15 are narrower in scope than claims 8 and 22 and include at least all of the limitations recited in claims 8 and 22. All of claims 1-4, 6-11, 13-18, 20-25, 27, and 28 recite the combination of the aforementioned limitations, which is not disclosed or suggested by the prior art of record; therefore, 1-4, 6-11, 13-18, 20-25, 27, and 28 are deemed to be allowable over the prior art of record.

Any comments considered necessary by applicant must be submitted no later than the payment of the issue fee and, to avoid processing delays, should preferably accompany the issue fee. Such submissions should be clearly labeled "Comments on Statement of Reasons for Allowance."

Conclusion

5. The prior art made of record and not relied upon is considered pertinent to applicant's disclosure.

Sziklai et al. (U.S. Patent No. 6,341,287) -- Discloses the generation of reports to document compliance with government standards, including the Water Quality Act of 1987.

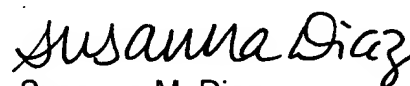
Risser ("The Status of the Science Examining Ecotones") -- Discloses the behavior of ecotones in response to changing weather conditions.

Kickert et al. ("Predictive Modeling of Effects Under Global Change") -- Discloses computer simulation models for evaluating ecological and environmental consequences of global change.

6. Any inquiry concerning this communication or earlier communications from the examiner should be directed to Susanna M. Diaz whose telephone number is (571) 272-6733. The examiner can normally be reached on Monday-Friday, 10 am - 6 pm.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Tariq Hafiz can be reached on (571) 272-6729. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).



Susanna M. Diaz
Primary Examiner
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October 1, 2005